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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/910,457 | 07/20/2001 | Shozo Imanishi | M2057-83 | 1740 |

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EXAMINER

SELF, SHELLEY M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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3725

DATE MAILED: 10/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/910,457

Applicant(s)

IMANISHI, SHOZO

Examiner

Shelley Self

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-- Th MAILING DATE of this communication appears on the cover sheet with th correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

Change “fist” to –first- (clm. 6, lines 8, 16)

Change “crank shaft” to –crankshaft (clm. 5, line 2, clm. 10, line 2, clm. 16, line 2)

Change “pont” to –point- (clm 26, line 25)

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claim 1, line 7 renders the claim vague; it is unclear what “*same location*” refers to.

4. With regard to claim 8, a second linear guide (line 4) and a second slider (line 5) are claimed, implying that there is a first linear guide and slider, however no first linear guide or slider is claimed, this renders the claim vague and indefinite.

5. With regard to claims 6 and 12, it is unclear how the first (one) middle link can have a second length (b) and a third length (c).

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6. With regard to claim 16, it is unclear if the lengths (b) and (c) are the length of the fulcrum point or a length respect to the fulcrum point to some other point on a link

7. Claims 2 and 7 recite the limitation "said cycle (clm. 2, line 4; clm. 7, line 11)". There is no antecedent basis for these limitations in the claims.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-5, as best as can be understood, and claims 7-9 are rejected under 35

U.S.C. 102(b) as being anticipated by Imanishi (5,848,568). Imanishi discloses a slide drive device for a press machine comprising a slide (3) having top and bottom dead center position (col. 5, lines 9, 10), an adjusting means for adjustment of a stroke (col. 4, lines 64-67 & col. 5, lines 1-6), adjusting means simultaneously adjusting top and bottom dead center positions (col. 5, lines 7-17), an adjusting means located at the same location on the press, driving means (8, 9, 12, 13, 21) transmitting a driving displacement to a first link, a first upper link (21) being connected to drive a slide in a cycle, a dynamically balancing means, a dynamic balancer (40) operably connected to a slide (3), a guiding means (7), a first horizontal link (45) operably connected to a slide (3), a crankshaft (12), a connecting rod (13) a first and second slider (14, 15), a first and second linear guide (4, 5).

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Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 6, as best as can be understood is rejected under 35 U.S.C. 103(a) as being unpatentable over Imanishi (5,848,568). Imanishi discloses a first upper link (21) having a length, a first middle link (47) having a length, a fulcrum pin (33) on a first middle link a third link (23) having a length. Imanishi does not disclose the relationship between the link lengths to be:

$$(a):(b)=(b):(c)$$

As to the relationship of the link lengths, at the time the invention was made, it would have been an obvious design modification to a person of ordinary skill in the art to have constructed to the links to have a length relationship of $(a):(b)=(b):(c)$ because Applicant has not disclosed that such relationship provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with links of equal and equal lengths as long as linear motion was transmitted to move the slide within the press vertically.

14. Claims 10-12 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imanishi (5,848,568) in view of Yoshida (6,148,720). Imanishi disclose the use of a crankshaft having an eccentric portion (col. 4, lines 14-15). Imanishi does not disclose the use of a

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crankshaft having multiple eccentric portions. Yoshida teaches the use of a crankshaft having multiple eccentric portions (col. 1, lines 43-47) so as to change/adjust the slide in up and down positions. Because both references are from similar arts and deal with a similar problem (i.e. transmitting rotational movement to linear movement to vertically displace a press slide) it would have been obvious at the time of the invention to one having ordinary skill in the art to replace Imanishi's eccentric crankshaft with a crankshaft having two eccentric portions so as to move the slide vertically in a press.

15. With regard to claim 11, Imanishi discloses a connection rod having small and large ends (col. 3, lines 64-67), wherein the large end is connected to one eccentric part of the crankshaft (col. 4, line 13-15), a small end attached to a driving means (col. 4, lines 10-12) whereby driving displacement is transmitted to a slide.

16. With regard to claim 12, Imanishi discloses a first upper link (21) having a length, a first middle link (47) having a length, a fulcrum pins (31, 33, 56) on a first middle link a third link (23) having a length. As noted above (para. 13), the link dimensions/relationship are clearly a matter of ordinary design consideration.

17. With regard to claim 16, as best as can be understood, Imanishi discloses a crankshaft (12) having a first eccentric (col. 4, lines 14-15), a connecting rod (13) operably joined to an eccentric part (col. 4, lines 14-16), first, second upper links (21, 21'), fulcrum pins (31, 33), middle link (47), operably joined to a first upper link (21) via a pin (33) and middle link and upper link operably effecting transfer of driving displacement to a slide in a cycle (col. 4, lines 64-67 & col. 5, lines 1-6). Imanishi does not disclose the use of a crankshaft having first and second eccentric portions. Yoshida teaches the use of a crankshaft having multiple eccentric

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portions (col. 1, lines 43-47) so as to change/adjust the slide in up and down positions.

Additionally, Imanishi does not disclose a connection rod having a length (a), fulcrum point having a length (c) from a second end and a fulcrum point having a length (b) from a first end whereby the lengths are related by:

$$(a):(b)=(b):(c)$$

Because both references are from similar arts and deal with a similar problem (i.e. transmitting rotational movement to linear movement to vertically displace a press slide) it would have been obvious at the time of the invention to one having ordinary skill in the art to replace Imanishi's eccentric crankshaft with a crankshaft having two eccentric portions so as to move the slide vertically in a press. As to the connection rod and fulcrum point lengths, as noted above (para. 13), the link dimensions are clearly a matter of ordinary design consideration.

18. With regard to claim 17, Imanishi discloses slide drive device for a press machine comprising a slide (3) having top and bottom dead center position (col. 5, lines 9, 10), an adjusting means for adjustment of a stroke (col. 4, lines 64-67 & col. 5, lines 1-6), adjusting means simultaneously adjusting top and bottom dead center positions (col. 5, lines 7-17), a adjusting means located at the same location on the press, at least one of a first and second horizontal link (45) having a first and second end for receiving driving displacement at a second end and adjustment at a first end whereby the slide is adjusted and driven in a cycle (col. 4, lines 47-67 & col. 5, lines 1-24).

Allowable Subject Matter

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19. Claims 13, 14, 15 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and if the 35 U.S.C. 112 rejection were overcome.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure Imanishi (JP 60180699) and Schockman (5,136,875).

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelley Self whose telephone number is (703) 305-5299. The examiner can normally be reached Mon-Fri from 8:30am to 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Allen Ostrager can be reached at (703) 308-3136. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3579 for regular and After Final communications.

22. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

SSelf
September 18, 2002


ALLEN OSTRAGER
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